IFWO

RAW SEQUENCE LISTING   DATE: 08/31/2004
PATENT APPLICATION: **US/10/782,257**   TIME: 12:22:49

Input Set : **N:\Crf3\RULE60\10782257.raw**
Output Set: **N:\CRF4\08312004\J782257.raw**

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 1 <110> APPLICANT: Biotica Technology Limited
 2       Leadlay, Peter F
 3       Pfizer, Inc.
 4       Staunton, James
 5       Cortes, Jesus
 6       McArthur, Hamish AI
 7 <120> TITLE OF INVENTION: Polyketides and their synthesis
 8 <130> FILE REFERENCE: IS/CP5787585
 9 <140> CURRENT APPLICATION NUMBER: US/10/782,257
10 <141> CURRENT FILING DATE: 2004-02-19
11 <150> PRIOR APPLICATION NUMBER: US/09/720,841
12 <151> PRIOR FILING DATE: 2001-08-13
13 <150> PRIOR APPLICATION NUMBER: GB 9814006.4
14 <151> PRIOR FILING DATE: 1998-06-29
15 <160> NUMBER OF SEQ ID NOS: 53
16 <170> SOFTWARE: PatentIn Ver. 2.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 398
20 <212> TYPE: PRT
21 <213> ORGANISM: Streptomyces sp. C5
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23       Met Val Thr Gly Leu Gly Ile Val Ala Pro Asn Gly Leu Gly Val Gly
24        1               5                  10                  15
25       Ala Ile Trp Asp Ala Val Leu Asn Gly Arg Asn Gly Ile Gly Pro Leu
26                       20                  25                  30
27       Arg Arg Phe Ala Asp Asp Gly Arg Leu Gly Arg Leu Ala Gly Glu Val
28                   35                  40                  45
29       Ser Asp Phe Val Pro Glu Asp His Leu Pro Lys Arg Leu Leu Val Gln
30               50                  55                  60
31       Thr Asp Pro Met Thr Gln Met Thr Ala Leu Ala Ala Ala Glu Trp Ala
32        65                  70                  75                  80
33       Leu Arg Glu Ala Gly Cys Ala Pro Ser Ser Pro Leu Glu Ala Gly Val
34                       85                  90                  95
35       Ile Thr Ala Ser Ala Ser Gly Gly Phe Ala Ser Gly Gln Arg Glu Leu
36                      100                 105                 110
37       Gln Asn Leu Trp Ser Lys Gly Pro Ala His Val Ser Ala Tyr Met Ser
38                      115                 120                 125
39       Phe Ala Trp Phe Tyr Ala Val Asn Thr Gly Gln Ile Ala Ile Arg His
40               130                 135                 140
41       Asp Leu Arg Gly Pro Val Gly Val Val Val Ala Glu Gln Ala Gly Gly
42       145                 150                 155                 160
43       Leu Asp Ala Leu Ala His Ala Arg Arg Lys Val Arg Gly Gly Ala Glu
44                      165                 170                 175
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45      Leu Ile Val Ser Gly Ala Met Asp Ser Ser Leu Cys Pro Tyr Gly Met
46                  180                 185                 190
47      Ala Ala Gln Val Arg Ser Gly Arg Leu Ser Gly Ser Asp Asp Pro Thr
48                  195                 200                 205
49      Ala Gly Tyr Leu Pro Phe Asp Arg Arg Ala Ala Gly His Val Pro Gly
50          210                 215                 220
51      Glu Gly Gly Ala Ile Leu Ala Val Glu Asp Ala Glu Arg Val Ala Glu
52      225                 230                 235                 240
53      Arg Gly Gly Lys Val Tyr Gly Ser Ile Ala Gly Thr Ala Ser Phe Asp
54                  245                 250                 255
55      Pro Pro Pro Gly Ser Gly Arg Pro Ser Ala Leu Ala Arg Ala Val Glu
56                  260                 265                 270
57      Thr Ala Leu Ala Asp Ala Gly Leu Asp Arg Ser Asp Ile Ala Val Val
58                  275                 280                 285
59      Phe Ala Asp Gly Ala Ala Val Gly Glu Leu Asp Val Ala Glu Ala Glu
60          290                 295                 300
61      Ala Leu Ala Ser Val Phe Gly Pro His Arg Val Pro Val Thr Val Pro
62      305                 310                 315                 320
63      Lys Thr Leu Thr Gly Arg Leu Tyr Ser Gly Ala Gly Pro Leu Asp Val
64                  325                 330                 335
65      Ala Thr Gly Leu Leu Ala Leu Arg Asp Glu Val Val Pro Ala Thr Gly
66                  340                 345                 350
67      His Val His Pro Asp Pro Asp Leu Pro Leu Asp Val Val Thr Gly Arg
68                  355                 360                 365
69      Pro Arg Ala Met Ala Asp Ala Arg Ala Ala Leu Val Val Ala Arg Gly
70          370                 375                 380
71      His Gly Gly Phe Asn Ser Ala Leu Val Val Arg Gly Ala Ala
72      385                 390                 395
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 425
76 <212> TYPE: PRT
77 <213> ORGANISM: Streptomyces peucetius
78 <400> SEQUENCE: 2
79      Met Thr Gly Thr Ala Ala Arg Thr Ala Ser Ser Gln Leu His Ala Ser
80          1               5                   10                  15
81      Pro Ala Gly Arg Arg Gly Leu Arg Gly Arg Ala Val Val Thr Gly Leu
82                  20                  25                  30
83      Gly Ile Val Ala Pro Asn Gly Leu Gly Val Gly Ala Tyr Trp Asp Ala
84              35                  40                  45
85      Val Leu Asn Gly Arg Asn Gly Ile Gly Pro Leu Arg Arg Phe Thr Gly
86          50                  55                  60
87      Asp Gly Arg Leu Gly Arg Leu Ala Gly Glu Val Ser Asp Phe Val Pro
88      65                  70                  75                  80
89      Glu Asp His Leu Pro Lys Arg Leu Leu Ala Gln Thr Asp Pro Met Thr
90                  85                  90                  95
91      Gln Tyr Ala Leu Ala Ala Ala Glu Trp Ala Leu Arg Glu Ser Gly Cys
92                  100                 105                 110
93      Ser Pro Ser Ser Pro Leu Glu Ala Gly Val Ile Thr Ala Ser Ala Ser
94                  115                 120                 125
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95        Gly Gly Phe Ala Phe Gly Gln Arg Glu Leu Gln Asn Leu Trp Ser Lys
96             130                 135                 140
97        Gly Pro Ala His Val Ser Ala Tyr Met Ser Phe Ala Trp Phe Tyr Ala
98        145         .         150                 155                 160
99        Val Asn Thr Gly Gln Ile Ala Ile Arg His Asp Leu Arg Gly Pro Val
100                           165                 170                 175
101         Gly Val Val Val Ala Glu Gln Ala Gly Gly Leu Asp Ala Leu Ala His
102                       180                 185                 190
103         Ala Arg Arg Lys Val Arg Gly Gly Ala Glu Leu Ile Val Ser Gly Ala
104             195                 200                 205
105         Val Asp Ser Ser Leu Cys Pro Tyr Gly Met Ala Ala Gln Val Lys Ser
106             210                 215                 220
107         Gly Arg Leu Ser Gly Ser Asp Asn Pro Thr Ala Gly Tyr Leu Pro Phe
108         225                 230                 235                 240
109         Asp Arg Arg Ala Ala Gly His Val Pro Gly Glu Gly Gly Ala Ile Leu
110                       245                 250                 255
111         Thr Val Glu Asp Ala Glu Arg Ala Ala Glu Arg Gly Ala Lys Val Tyr
112                       260                 265                 270
113         Gly Ser Ile Ala Gly Tyr Gly Ala Ser Phe Asp Pro Pro Pro Gly Ser
114             275                 280                 285
115         Gly Arg Pro Ser Ala Leu Ala Arg Ala Val Glu Thr Ala Leu Ala Asp
116             290                 295                 300
117         Ala Gly Leu Asp Gly Ser Asp Ile Ala Val Val Phe Ala Asp Gly Ala
118         305                 310                 315                 320
119         Ala Val Pro Glu Leu Asp Ala Ala Glu Ala Glu Ala Leu Ala Ser Val
120                       325                 330                 335
121         Phe Gly Pro Arg Arg Val Pro Val Thr Val Pro Lys Thr Leu Thr Gly
122                       340                 345                 350
123         Arg Leu Tyr Ser Gly Ala Gly Pro Leu Asp Val Ala Thr Ala Leu Leu
124             355                 360                 365
125         Ala Leu Arg Asp Glu Val Val Pro Ala Thr Ala His Val Asp Pro Asp
126             370                 375                 380
127         Pro Asp Leu Pro Leu Asp Val Val Thr Gly Arg Pro Arg Ser Leu Ala
128         385                 390                 395                 400
129         Asp Ala Arg Ala Ala Leu Leu Val Ala Arg Gly Tyr Gly Gly Phe Asn
130                       405                 410                 415
131         Ser Ala Leu Val Val Arg Gly Ala Ala
132                   420                 425
134 <210> SEQ ID NO: 3
135 <211> LENGTH: 407
136 <212> TYPE: PRT
137 <213> ORGANISM: Streptomyces coelicolor
138 <400> SEQUENCE: 3
139         Met Ser Val Leu Ile Thr Gly Val Gly Val Val Ala Pro Asn Gly Leu
140           1             5                 10                 15
141         Gly Leu Ala Pro Tyr Trp Ser Ala Val Leu Asp Gly Arg His Gly Leu
142                   20                 25                 30
143         Gly Pro Val Thr Arg Phe Asp Val Ser Arg Tyr Pro Ala Thr Leu Ala
144               35                 40                 45
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145       Gly Gln Ile Asp Asp Phe His Ala Pro Asp His Ile Pro Gly Arg Leu
146            50                  55                  60
147       Leu Pro Gln Thr Asp Pro Ser Thr Arg Leu Ala Leu Thr Ala Ala Asp
148            65                  70                  75                  80
149       Trp Ala Leu Gln Asp Ala Lys Ala Asp Pro Glu Ser Leu Thr Asp Tyr
150                           85                  90                  95
151       Asp Met Gly Val Val Thr Ala Asn Ala Cys Gly Gly Phe Asp Phe Thr
152                   100                 105                 110
153       His Arg Glu Phe Arg Lys Leu Trp Ser Glu Gly Pro Lys Ser Val Ser
154                   115                 120                 125
155       Val Tyr Glu Ser Phe Ala Trp Phe Tyr Ala Val Asn Thr Gly Gln Ile
156            130                 135                 140
157       Ser Ile Arg His Gly Met Arg Gly Pro Ser Ser Ala Leu Val Ala Glu
158       145                 150                 155                 160
159       Gln Ala Gly Gly Leu Asp Ala Leu Gly His Ala Arg Arg Thr Ile Arg
160                   165                 170                 175
161       Arg Gly Thr Pro Leu Val Val Ser Gly Gly Val Asp Ser Ala Leu Asp
162                   180                 185                 190
163       Pro Trp Gly Trp Val Ser Gln Ile Ala Ser Gly Arg Ile Ser Thr Ala
164                   195                 200                 205
165       Thr Asp Pro Asp Arg Ala Tyr Leu Pro Phe Asp Glu Arg Ala Ala Gly
166            210                 215                 220
167       Tyr Val Pro Gly Glu Gly Gly Ala Ile Leu Val Leu Glu Asp Ser Ala
168       225                 230                 235                 240
169       Ala Ala Glu Ala Arg Gly Arg His Asp Ala Tyr Gly Glu Leu Ala Gly
170                   245                 250                 255
171       Cys Ala Ser Thr Phe Asp Pro Ala Pro Gly Ser Gly Arg Pro Ala Gly
172                   260                 265                 270
173       Leu Glu Arg Ala Ile Arg Leu Ala Leu Asn Asp Ala Gly Thr Gly Pro
174                   275                 280                 285
175       Glu Asp Val Asp Val Val Phe Ala Asp Gly Ala Gly Val Pro Glu Leu
176            290                 295                 300
177       Asp Ala Ala Glu Ala Arg Ala Ile Gly Arg Val Phe Gly Arg Glu Gly
178       305                 310                 315                 320
179       Val Pro Val Thr Val Pro Lys Thr Thr Thr Gly Arg Leu Tyr Ser Gly
180                   325                 330                 335
181       Gly Gly Pro Leu Asp Val Val Thr Ala Leu Met Ser Leu Arg Glu Gly
182            340                 345                 350
183       Val Ile Ala Pro Thr Ala Gly Val Thr Ser Val Pro Arg Glu Tyr Gly
184            355                 360                 365
185       Ile Asp Leu Val Leu Gly Glu Pro Arg Ser Thr Ala Pro Arg Thr Ala
186       370                 375                 380
187       Leu Val Leu Ala Arg Gly Arg Trp Gly Phe Asn Ser Ala Ala Val Leu
188       385                 390                 395                 400
189       Arg Arg Phe Ala Pro Thr Pro
190                   405
192 <210> SEQ ID NO: 4
193 <211> LENGTH: 403
194 <212> TYPE: PRT
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195  <213> ORGANISM: Saccharopolyspora hirsuta
196  <400> SEQUENCE: 4
197       Met Ser Thr Trp Val Thr Gly Met Gly Val Val Ala Pro Asn Gly Leu
198        1               5                  10                  15
199       Gly Ala Asp Asp His Trp Ala Ala Thr Leu Lys Gly Arg His Gly Ile
200                    20                  25                  30
201       Ser Arg Leu Ser Arg Phe Asp Pro Thr Gly Tyr Pro Ala Glu Leu Ala
202                35                  40                  45
203       Gly Gln Val Leu Asp Phe Asp Ala Thr Glu His Leu Pro Lys Arg Leu
204            50                  55                  60
205       Leu Pro Gln Thr Asp Val Ser Thr Arg Phe Ala Leu Ala Ala Ala Ala
206        65                  70                  75                  80
207       Trp Ala Leu Ala Asp Ala Glu Val Asp Pro Ala Glu Leu Pro Glu Tyr
208                    85                  90                  95
209       Gly Thr Gly Val Ile Thr Ser Asn Ala Thr Gly Gly Phe Glu Phe Thr
210                   100                 105                 110
211       His Arg Glu Phe Arg Lys Leu Trp Ala Gln Gly Pro Glu Phe Val Ser
212                115                 120                 125
213       Val Tyr Glu Ser Phe Ala Trp Phe Tyr Ala Val Asn Thr Gly Gln Ile
214            130                 135                 140
215       Ser Ile Arg His Gly Leu Arg Gly Pro Gly Ser Val Leu Val Ala Glu
216       145                 150                 155                 160
217       Gln Ala Gly Gly Leu Asp Ala Val Gly His Gly Gly Ala Val Arg Asn
218                   165                 170                 175
219       Gly Thr Pro Met Val Val Thr Gly Gly Val Asp Ser Ser Phe Asp Pro
220                   180                 185                 190
221       Trp Gly Trp Val Ser His Val Ser Ser Gly Arg Val Ser Arg Ala Thr
222                195                 200                 205
223       Asp Pro Gly Arg Ala Tyr Leu Pro Phe Asp Val Ala Ala Asn Gly Tyr
224            210                 215                 220
225       Val Pro Gly Glu Gly Gly Ala Ile Leu Leu Leu Glu Asp Ala Glu Ser
226       225                 230                 235                 240
227       Ala Lys Ala Arg Gly Ala Thr Gly Tyr Gly Glu Ile Ala Gly Tyr Ala
228                   245                 250                 255
229       Ala Thr Phe Asp Pro Ala Pro Gly Ser Glu Arg Pro Pro Ala Leu Arg
230                   260                 265                 270
231       Arg Ala Ile Glu Leu Ala Leu Ala Asp Ala Glu Leu Arg Pro Glu Gln
232                275                 280                 285
233       Val Asp Val Val Phe Ala Asp Ala Ala Gly Val Ala Glu Leu Asp Ala
234            290                 295                 300
235       Ile Glu Ala Ala Ala Ile Arg Glu Leu Phe Gly Pro Ser Gly Val Pro
236       305                 310                 315                 320
237       Val Thr Ala Pro Lys Thr Met Thr Gly Arg Leu Tyr Ser Gly Gly Gly
238                   325                 330                 335
239       Pro Leu Asp Leu Val Ala Ala Leu Leu Ala Ile Arg Asp Gly Val Ile
240                   340                 345                 350
241       Pro Pro Thr Val His Thr Ala Glu Pro Val Pro Glu His Gln Leu Asp
242                355                 360                 365
243       Leu Val Thr Gly Asp Pro Arg His Gln Gln Leu Gly Thr Ala Leu Val
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VERIFICATION SUMMARY   DATE: 08/31/2004
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